

Claims:

1. A cable capable of providing a visual indication of traffic, said cable comprising:

one or more wires; and

5 at least one connector connected to the wires, said connector having detection circuitry capable of detecting the traffic on the cable and generating a detection signal responsive to the traffic, and a traffic indicator coupled to the detection circuitry to provide the 10 visual indication of the traffic responsive to the detection signal,

said detection circuitry comprising:

driving circuitry coupled to at least one said wire, said at least one said wire carrying a data 15 signal; and

a transistor coupled to the driving circuitry and the traffic indicator,

20 wherein the driving circuitry drives the transistor responsive to the data signal to generate the detection signal, which is used to drive the traffic indicator.

25 2. The cable of claim 1, wherein said cable is selected from a group consisting of USB, FireWire, COM, LPT and SCSI cables.

30 3. The cable of claim 1, wherein the traffic indicator comprises one selected from a group consisting of a light emitting diode (LED), an electro-luminescent lamp, a translucent connector end and a translucent wire covering.

4. The cable of claim 1, wherein at least one of the wires carries power, and the traffic indicator receives power from said at least one of the wires that carries power.

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5. The cable of claim 1, wherein the driving circuitry comprises a diode.

6. The cable of claim 1, wherein the driving circuitry comprises:

a driving transistor having a first gate, a second gate and a third gate,

wherein the first gate is coupled to said at least one data signal carrying wire, the second gate is coupled to power and a gate of the transistor, and the third gate is coupled to ground, and

wherein the transistor turns on when the driving transistor turns off, and the transistor turns off when the driving transistor turns on, thereby generating the detection signal.

7. The cable of claim 1, wherein the driving circuitry comprises:

first and second driving transistors, each having a first gate, a second gate and a third gate,

wherein for the first driving transistor, the first gate is coupled to said at least one data signal carrying wire, the second gate is coupled to power, and the third gate is coupled to ground,

30 wherein for the second driving transistor, the first gate is coupled to the second gate of the first transistor, the second gate is coupled to power and a gate

of the transistor, and the third gate is coupled to ground, and

5 wherein the transistor turns on when the first driving transistor turns on, and the transistor turns off when the first driving transistor turns off, thereby generating the detection signal.

8. The cable of claim 1, wherein said at least one connector comprises an inner casing, an outer casing and a 10 plug, wherein the inner casing at least partially envelopes the detection circuitry, the outer casing at least partially envelopes the inner casing, and the plug is coupled to said one or more wires and the detection circuitry.

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9. The cable of claim 8, wherein the inner casing has an opening formed thereon for allowing light generated by the traffic indicator to exit the inner casing.

20 10. The cable of claim 8, wherein at least a portion of at least one of the inner casing and the outer casing is either transparent or semi-transparent to allow at least a portion of light generated by the traffic indicator to exit the connector.

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11. The cable of claim 1, wherein the driving circuitry comprises an amplifier for amplifying the data signal.

30 12. An adapter for a cable having one or more wires to provide a visual indication of traffic on the cable, said adapter comprising:

a first plug for interfacing with the cable;
 a second plug for interfacing between the first
 plug and an electronic device; and

5 detection circuitry capable of detecting the
 traffic on the cable and generating a detection signal
 responsive to the traffic, and a traffic indicator coupled
 to the detection circuitry to provide the visual indication
 of the traffic responsive to the detection signal,

 said detection circuitry comprising:

10 driving circuitry coupled to at least one
 said wire in use, said at least one said wire carrying a
 data signal; and

 a transistor coupled to the driving
 circuitry and the traffic indicator,

15 wherein the driving circuitry in use drives the
 transistor responsive to the data signal to generate the
 detection signal, which is used to drive the traffic
 indicator.

20 13. The adapter of claim 12, wherein said adapter is
 capable of interfacing with a cable selected from a group
 consisting of USB, FireWire, COM, LPT and SCSI cables.

25 14. The adapter of claim 12, wherein the traffic
 indicator comprises one selected from a group consisting of
 a light emitting diode (LED), an electro-luminescent lamp,
 a translucent connector end and a translucent wire
 covering.

30 15. The adapter of claim 12, wherein at least one of
 the wires carries power, and the traffic indicator in use

receives power from said at least one wire that carries power.

16. The adapter of claim 15, wherein the driving
5 circuitry comprises a diode.

17. The adapter of claim 15, wherein the driving circuitry comprises:

10 a driving transistor having a first gate, a second gate and a third gate,

wherein, in use, the first gate is coupled to said at least one data signal carrying wire, the second gate is coupled to power and a gate of the transistor, and the third gate is coupled to ground, and

15 wherein, in use, the transistor turns on when the driving transistor turns off, and the transistor turns off when the driving transistor turns on, thereby generating the detection signal.

20 18. The adapter of claim 15, wherein the driving circuitry comprises:

first and second driving transistors, each having a first gate, a second gate and a third gate,

25 wherein, in use, for the first driving transistor, the first gate is coupled to said at least one data signal carrying wire, the second gate is coupled to power, and the third gate is coupled to ground,

30 wherein, in use, for the second driving transistor, the first gate is coupled to the second gate of the first transistor, the second gate is coupled to power and a gate of the transistor, and the third gate is coupled to ground, and

wherein, in use, the transistor turns on when the first driving transistor turns on, and the transistor turns off when the first driving transistor turns off, thereby generating the detection signal.

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19. The adapter of claim 12, wherein the driving circuitry comprises an amplifier for amplifying the data signal.

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20. A traffic detector that can detect traffic in a cable having one or more wires for connecting a computer to a peripheral device, said traffic detector comprising:

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detection circuitry capable of detecting electromagnetic radiation generated by the traffic in at least one of the wires, and of generating a detection signal in response; and

a traffic indicator capable of receiving the detection signal, and of providing a visual indication of the traffic responsive to the detection signal.

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21. The traffic detector of claim 20, wherein said cable is selected from a group consisting of USB, FireWire, COM, LPT and SCSI cables.

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22. The traffic detector of claim 20, wherein the traffic indicator comprises one selected from a group consisting of a light emitting diode (LED), an electro-luminescent lamp, a translucent connector end and a translucent wire covering.

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23. The traffic detector of claim 20, wherein at least one of the wires carries data, and the detection

circuitry detects traffic through monitoring the electromagnetic radiation generated by said at least one wire that carries data.

5 24. The traffic detector of claim 20, wherein said traffic detector comprises a flexible portion that can be wrapped around the cable.

10 25. A hub/switch capable of providing a visual indication of traffic on at least one cable, said hub/switch comprising:

15 detection circuitry capable of detecting the traffic on said at least one cable and generating a detection signal responsive to the traffic; and

20 at least one traffic indicator coupled to the detection circuitry to provide the visual indication of the traffic responsive to the detection signal,

25 said detection circuitry comprising:

driving circuitry coupled to at least one wire of said at least one cable, said at least one wire carrying a data signal; and

a transistor coupled to the driving circuitry and said at least one traffic indicator,

25 wherein the driving circuitry drives the transistor responsive to the data signal to generate the detection signal, which is used to drive said at least one traffic indicator.